

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Piedmont Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

INGENCO - Rockville Plant
Goochland County, Virginia
Permit No. PRO – 51201

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, INGENCO has applied for a Title V Operating Permit for its Rockville facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:

Air Permit Manager:_____ Date:

Regional Permit Manager:_____ Date:

FACILITY INFORMATION

Permittee

Combined Heat & Power, Incorporated
Rockville Plant
2250 Dabney Rd.
Richmond, VA 23230

Facility

Combined Heat & Power, Incorporated
Rockville Plant
2361 Lanier Road,
Goochland County, VA

Responsible Official

Mr. Charles J. Packard
President

Contact person

Mr. Robert L. Greene , Ph.D
Environmental Compliance Manager
(804) 521-3557 FAX 3583

AIRS Identification Number: 51-075-000030

FACILITY DESCRIPTION:

SIC Code 4931 – The facility is a 12 MW power generation facility. This is one of several facilities in this region, which is run by the operating company, INGENCO. This facility is located in an area in attainment for all pollutants at the time of public notice. The facility is major for NOx and CO.

COMPLIANCE STATUS:

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. The last air inspection (Full Compliance Evaluation) was conducted at the facility on September 27, 2002, and the facility was found to be out of compliance. The facility and DEQ have entered into a Consent Order Dated August 12, 2003. This Consent Order is to resolve the Notice of Violation dated March 24, 2003 alleging noncompliance with May 30, 2000 permit. The Consent Order process was completed on August 29, 2003 and a new NSR permit issued on February 3, 2004 reflecting the permit changes needed.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
E1-E16	S-1	350 kW Generators (16 in Group R-1)	Each engine is rated at 3.2 MMBtu/hour heat input, Detroit Diesel Model 6063-GK 60.	NA - air-to-fuel ratio control, turbo-charging, custom-built dry after-coolers and charge-air cooling systems	NA	NOx, CO, SOx, VOC, PM, PM10, PCBs	02/03/2004
E17-E40	S-2	350 kW Generators (24 in Group R-2)	Same.	Same.	NA	Same.	Same.

EMISSIONS INVENTORY:

A summary of INGENCO - Rockville Facility's most recent annual emissions is shown below.

PLANTWIDE EMISSIONS SUMMARY [TONS PER YEAR]	
CRITERIA POLLUTANTS	2002 ACTUAL EMISSIONS
Particulate Matter (PM10)	0.96
Nitrogen Oxides (NOx)	101.76
Sulfur Dioxide (SO2)	7.00
Carbon Monoxide (CO)	5.76
VOC	0.96

PLANTWIDE EMISSIONS SUMMARY [TONS PER YEAR]	
HAZARDOUS POLLUTANTS	2002 ACTUAL EMISSIONS
PCBs (Aroclors)	NR*

* NR – Not Reported.

LEGAL AND FACTUAL BASIS FOR DRAFT PERMIT CONDITIONS:

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the Commonwealth of Virginia Federal Operating Permit Regulations for the purposes of Title V of the Federal Clean Air Act (9 VAC 5 Chapter 80 Article 1), and underlying applicable requirements in other state and federal rules. Applicable requirement means all of the following as they apply to emissions units in a Title V source:

- a. Any standard or other requirement provided for in the State Implementation Plan or the Federal Implementation Plan, including any source-specific provisions such as consent agreements or orders.
- b. Any term or condition of any pre-construction permit issued pursuant to 9 VAC 5-80-10, Article 8 (9 VAC 5-80-1700 et seq.) of this part or 9 VAC 5-80-30 or of any operating permit issued pursuant to 9 VAC 5 Chapter 80 Article 5, except for terms or conditions derived from applicable state requirements or from any requirement of these regulations not included in the definition of applicable requirement.
- c. Any standard or other requirement prescribed under these regulations, particularly the provisions of 9 VAC 5 Chapter 40 (9 VAC 5-40-10 et seq.), 9 VAC 5-50 (9 VAC 5-50-10 et seq.) or 9 VAC 5-60 (9 VAC 5-60-10 et seq.), adopted pursuant to requirements of the federal Clean Air Act or under _ 111, 112 or 129 of the federal Clean Air Act.
- d. Any requirement concerning accident prevention under §112(r)(7) of the federal Clean Air Act.
- e. Any compliance monitoring requirements established pursuant to either §504(b) or §114(a)(3) of the federal Clean Air Act or these regulations.
- f. Any standard or other requirement for consumer and commercial products under § 183(e) of the federal Clean Air Act.
- g. Any standard or other requirement for tank vessels under §183(f) of the federal Clean Air Act.
- h. Any standard or other requirement in 40 CFR, Part 55 to control air pollution from outer continental shelf sources.
- i. Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the federal Clean Air Act, unless the administrator has determined that such requirements need not be contained in a permit issued under this article.
- j. With regard to temporary sources subject to 9 VAC 580-130, (i) any ambient air quality standard, except applicable state requirements, and (ii) requirements regarding increments or visibility as provided in Article 8 (9 VAC 5-80-1700 et seq.) of this part.
- k. Any standard or other requirement of the acid deposition control program under Title IV of the Clean Air Act or the regulations promulgated thereunder.
- l. Any standard or other requirement governing solid waste incineration under §129 of the Clean Air Act. Each state and federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 9 VAC 5-80 Article 1 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the state, but is not federally-enforceable is identified in the draft Title V permit as such.

Limitations

- ▶ The permitted INGENCO - Rockville Plant has specific applicable requirements contained in Condition numbers 3 through 30 of the February 3, 2004 NSR permit and are included as Conditions numbers 2 through 28 in the Title V permit.

Periodic Monitoring

The monitoring and record keeping requirements in Condition numbers 7 and 8 of the NSR permit have been used as is to meet Part 70 requirements.

Record keeping

The permit includes requirements for maintaining records of all monitoring and testing required by the NSR permit. These specific requirements are listed in the February 3, 2004 NSR permit condition 25 and is included in the Title V permit.

Testing

The permit does require source to conduct initial and ongoing performance tests for NO_x and CO. A table of test methods has been included in the permit if additional testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC/NMOC	EPA Method 18 Or 25A/25C
NO _x	EPA Method 7E
SO ₂	EPA Method 6C
CO	EPA Method 10
PM/PM ₁₀	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

The initial performance test and ongoing performance test are included in the February 3, 2004 NSR permit Condition numbers 21, 22, 23 and 24 are included in the Title V permit.

Reporting

All reports required by Part 70 shall be prepared and submitted to EPA and the Piedmont Regional Office in accordance with procedures outlined in the general conditions in the Title V permit.

The requirement to submit notification of control equipment removal and malfunction was included in the Title V permit using the permit language used in Condition numbers 27, 28 and 29 of the February 3, 2004 NSR permit.

Streamlined Requirements

None.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general condition cite(s) the Article(s) that follow(s):
Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80.
Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow:
9 VAC 5-80-80. Application
9 VAC 5-80-140. Permit Shield
9 VAC 5-80-150. Action on Permit Applications

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition cites the sections that follow:

9 VAC 5-40-41. Emissions Monitoring Procedures for Existing Sources
9 VAC 5-40-50. Notification, Records and Reporting
9 VAC 5-50-50. Notification, Records and Reporting

This general condition contains a citation from the Code of Federal Regulations as follows:
40 CFR 60.13 (h). Monitoring Requirements.

J. Permit Modification

This general condition cites the sections that follow:
9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources
9 VAC 5-80-190. Changes to Permits.
9 VAC 5-80-260. Enforcement.
9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
9 VAC 5-80-1790. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Non-attainment Areas

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follow:

40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.

40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.

40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

9 VAC 5-60-70. Designated Emissions Standards

9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable:

9 VAC 5-50-310, Odorous Emissions

REQUEST FOR VARIANCES OR ALTERNATIVES:

None.

FUTURE APPLICABLE REQUIREMENTS

None.

INAPPLICABLE REQUIREMENTS

None were identified in the application.

COMPLIANCE PLAN

None.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, record keeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110. The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
T41	Fuel oil storage tank	5-80-720 B.	VOC	15,000 Gallon
T42	Fuel oil storage tank	5-80-720 B.	VOC	15,000 Gallon
T43	Fuel oil storage tank	5-80-720 B.	VOC	10,000 Gallon
T44	Fuel oil storage tank	5-80-720 B.	VOC	13,500 Gallon
T45	Fuel oil storage tank	5-80-720 B.	VOC	13,500 Gallon
T46	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T47	Fuel oil storage tank	5-80-720 B.	VOC	20,000 Gallon
T48	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T49	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T50	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T51	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T52	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T53	Fuel oil storage tank	5-80-720 B.	VOC	20,700 Gallon
T54	Fuel oil storage tank	5-80-720 B.	VOC	31,000 Gallon
T55	Fuel oil storage tank	5-80-720 B.	VOC	31,000 Gallon
T56	Fuel oil storage tank	5-80-720 B.	VOC	31,000 Gallon

CONFIDENTIAL INFORMATION

The applicant did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

COMMENT PERIOD:

The public notice appeared in the **Central Virginia Gazette** on February 19, 2004.
Beginning Date: February 19, 2004
Ending Date: March 15, 2004

No written comments were received during the Public Comment period or from US EPA for the concurrent 45 day comment period.